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LEVERAGING A STRATEGIC INTELLIGENCE MOBILE MISSILE ENTERPRISE FOR THEATER MISSILE DEFENSE WARFIGHTERS

by

David R. Macedonia, SIO, DIA

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BIOGRAPHY

Mr. Macedonia is currently a student at the Air War College, Maxwell Air Force Base, Alabama. Prior to Air War College, Mr. Macedonia served as a Strategic Planner at the Defense Intelligence Agency. His other positions with DIA include Senior Intelligence Officer for Plans and Exercises; Operations Center Senior Watch Officer; and Deputy Office Chief for Offensive Systems, which included Short-Range Ballistic Missiles. Mr. Macedonia retired in 2002 as an Army Air Defense Lieutenant Colonel, after 20 years of active duty service. Mr. Macedonia participated in both OPERATION DESERT STORM and SOUTHERN WATCH. He has served as Patriot Task Force Battalion Operations Officer, Patriot Battery Commander, and Liaison Officer in Southwest Asia. He has attended the US Army Combined Arms and Services Staff School and US Army Command and General Staff College. He holds an undergraduate degree from Shippensburg University of Pennsylvania and a Masters Degree from Central Michigan University.

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INTRODUCTION

Mobile ballistic and cruise missiles are the highest priority time sensitive threats in a Joint Task Force (JTF) Commander's area of operations because they threaten civilian population centers, and military and industrial targets. When an adversary employs missiles with nuclear, biological, or chemical warheads, they can quickly disrupt friendly force offensive operations. Potential foreign adversaries have systems with the capability to target US and allied critical assets outside of the potential battlefield, and the threat promises to grow with time.¹

United States (US) military forces have experienced considerable difficulty detecting, fixing, and targeting mobile missiles because they are difficult to locate and are not required to emit any collectable signals prior to launch operations. Regional adversaries can hide mobile missiles before launch, then quickly emplace, fire and displace before the US can react. The US Intelligence Community (IC) assesses that regional adversaries may use denial and deception practices, that further hamper the JTF's ability to detect, fix and target time sensitive, mobile missiles.²

There were 18 Short-Range Ballistic Missile (SRBM) attacks against coalition forces during the 2003 Operation Iraqi Freedom (OIF) Offensive that were either intercepted and destroyed by Patriot systems or allowed to land harmlessly in the Persian Gulf or open desert.³ On the other hand, despite the overall success of Theater Missile Defense (TMD) Warfighters in OIF, Iraqi SRBMs and their reduced engagement timelines heavily stressed the coalition's sense, warn and detect architecture and forced rapid decisions in a compressed engagement cycle. In addition, OIF marks the first time that US TMD Warfighters have faced cruise missiles in combat. Chinese-built, Iraqi employed Seersucker cruise missiles penetrated friendly airspace and reached their intended targets.⁴

In 2006, the Director of Defense Intelligence Agency (DIA) tasked the Missile and Space Intelligence Center (MSIC), a DIA Scientific and Technical Production Center, to coordinate defense IC Critical Mobile Targets (CMT) activities and advise DIA on improving IC support in expediting acquisition-fielding solutions to the CMT problem. CMT community efforts provide scientific and technical intelligence data for organizations developing sensors, sensor fusion techniques and automatic target recognition algorithms to find, identify, target and destroy CMT in a camouflage, concealment &deception environment. In addition to these technical efforts, I propose that the IC build on warfighter exercise and combat support initiatives to form a new organization. The Strategic Intelligence Mobile Missile Enterprise (SIMME) is a team that forms, if needed, to support a Joint Task Force Commander during a crisis to improve analytic support and provide TMD Warfighters a decision-making advantage.

The thesis of this paper is the IC must develop a SIMME, in order to gain and provide enhanced regional mobile missile threat situational awareness and decision advantage to TMD Warfighters during crisis. Additionally, the way to achieve that is unified IC action embodied in the SIMME concept. The SIMME will accomplish two things. First, the SIMME will provide quicker, more accurate TMD Intelligence Preparation of the Battlespace (TMD IPB) support. For the SIMME, TMD IPB provides a "systematic, continuous, and common methodology for analyzing the adversary theater missile force." Second, it will help improve IC response times, thereby reducing the mobile missile threat in theater to US forces or allies.

Methodology and Scope

First, this work will define the SIMME. Second, it will identify and examine possible analytical resources and organizations within the SIMME. Third, it will define the TMD Warfighter Community. Fourth, it will examine how the SIMME and TMD Warfighter

Community should collaborate with each other to win the counter mobile missile fight. Fifth, it will analyze the favorable IC organizational and cultural conditions for establishment of a SIMME. Finally, it will provide recommendations/conclusions on how to establish a SIMME.

For the purposes of this paper mobile missiles consists of ballistic missiles, and landattack cruise missiles (LACMs). Land based ballistic missiles include SRBMs, Medium-Range Ballistic Missiles (MRBMs and Intermediate-Range Ballistic Missiles (IRBMs). The IC defines ballistic missiles ranges as, SRBMs (70 to 1000 Kilometers), MRBMs (1000-3000 KM) and Intermediate-Range Ballistic Missiles (IRBMs) (3000-5500 KM). However, this paper does not address Surface-to-Air Missiles (SAMs) and Intercontinental Ballistic Missiles (5500 KM and Longer).

Ballistic Missiles are characterized by their trajectory, having one or more boosters, and an initial steering vector. Once launched, ballistic missiles are guided to their preselected targets using gyroscopic assemblies.⁸

The Asian continent contains the prevalence of medium- to long-range ballistic missiles as shown in Table 1. The availability of weapons of mass destruction (WMD) for use on ballistic missiles greatly increases the significance of this threat.

Table 1. Deployed ballistic missiles by type/range and country

Ballistic-Missile Type and Range Countries

(ICBM)/IRBM)

(Land and Sea-based)

>3000 km

Intercontinental/Intermediate Range Known: China, Russia, United Kingdom

Possible: India, Iran, North Korea

Israel, North Korea, Saudi Arabia, China, India, Pakistan, Medium Range

1000-3000 km Iran

Afghanistan, Algeria, Argentina, Armenia, Belarus, Short Range 70-1000 km

Bulgaria, China, Czech Republic, Egypt, Greece, India, Iran, Israel, Kazakhstan, Libya, Netherlands, North Korea, Pakistan, Romania, Russia, Serbia, Slovakia, South Korea, Syria, Taiwan, Turkey, Turkmenistan, Ukraine, United

Arab Emirates, Vietnam, and Yemen.

Adapted from Jeffrey Butler. The Influence of Politics, Technology, and Asia on Future of US Missile Defense. AU Press, 2007.

LACMs are "weapon systems that can present a major regional threat to military operations. They are usually categorized by intended mission and launch mode (instead of maximum range). A LACM is an unmanned, armed aerial vehicle designed to attack a fixed or mobile ground based target."9

Table 2 illustrates the worldwide LACM threat. Proliferation of LACMs will expand to 20 countries in the next ten years. 10 The majority of new LACMs will be very accurate, conventionally armed, and probably available for export. Low-flying, accurate, stealthy cruise missiles, which can attack friendly targets from several directions, will stress TMD defenses.

Table 2. Deployed Land Attack Cruise Missile by Selected Country and Launch Mode

Countries Launch Mode

China Air and Undetermined

Russia Air, Submarine, Ground, Ship

Pakistan Air, Ground

UAE Air Israel Air India Air

South Africa Air, Ground

Adapted from *Ballistic and Cruise Missile Threat*. National Air and Space Intelligence Center, 2009.

BODY

Current Deficiencies and Rational for SIMME

In July 2008, the Office of the Director of National Intelligence (ODNI) published *Vision* 2015: A Globally Networked and Integrated Intelligence Enterprise to chart a new path for how IC agencies will work together in the 21st century. The vision's principles are integration, collaboration and innovation. ODNI's mission is to create "decision advantage" for policymakers, warfighters, homeland security officials and law enforcement personnel.¹¹

The existing TMD effort by the IC is insufficient for mission success, and there are four major areas that need improvement and point to the creation of a SIMME.

No IC organization, agency or center has overall responsibility or lead for coordinating production, analysis or intelligence sharing efforts between the IC and JTFs during mobile missile crisis operations.¹² The JTF Commander can leverage the IC through a SIMME. The IC can "Push" products to the JTF, and the JTF can "Pull" by virtual collaboration sites.

There is a lack of experienced TBM/LACM Intelligence analysts in AAMDCs and AOC ISRDs. Personnel turnover and inexperience means the JTF is relying on junior intelligence personnel for key technical functions for which they perform sub-optimally. The

SIMME therefore provides the JTF a few IC SMEs who, by using virtual networking, are able to tap into the broad range of deep expertise in the IC. In other words, adding a single IC body to a shift brings to the JTF that person's personal and professional network of colleagues; in essence, a few bodies provide a multiplier effect for the TMD Warfighter. One experienced SME can serve as a 'director' for a team of inexperienced junior personnel to help them work quickly and efficiently.¹³

The IC can provide better Mobile Missile Indications and Warning to the JTF. The enterprise provides Theater Commander "immediate" situational awareness of launches to the JTF Commander. The JTF Commander has a single point of reference that provides both warning and alert. Presumably, the speed and accuracy of the information he gets from the SIMME should give him greater confidence in his overall situational awareness and enable him to make force protection decisions sooner and with improved results.¹⁴

US military forces have experienced considerable difficulty detecting, fixing, and targeting mobile missiles with sufficient accuracy and timeliness. The SIMME provides Theater Commander "immediate" situational awareness of launches and movements to warfighter. This could enable better targeting of mobile missiles by US forces. The SIMME, therefore, provides both the knowledge and structure to help the JTF identify or predict TEL launch sites, hide and transload sites, or operational boxes. The SIMME facilitates more responsive decision cycles, increases collaboration and integration across enterprise, and enhances coordination across the IC. 15

Defining the SIMME

The new SIMME is envisioned as net-centric, information driven activity, which is agile, lean and flexible enough to respond to a dynamic mobile missile environment. It should remove barriers to cross-agency and center collaboration by focusing on common networks, collaboration and visualization tools and processes. It should be a globally networked and integrated intelligence endeavor, consisting of various mobile missile analysts and operations center personnel from myriad national intelligence agencies, centers and COCOMs. It should maintain and provide situational awareness during crisis of the adversary regional mobile missile force.

In support of the SIMME, a selected team of mobile missile analysts would deploy forward to the potential battlefield, embed into TMD Warfighter's intelligence cells and maintain a "small footprint forward." These forward deployed mobile missile analyst Subject Matter Experts (SMEs) provide extensive mobile missile expertise, knowledge of IC products and resources, and facilitate overall TMD Warfighter mobile missile situational awareness.

Reach back mobile missile analysts and operations center watch officers provide support from their parent COCOM, IC agency or center using collaboration tools and networks. They maintain a "large virtual footprint." Having a robust reach back capability is every bit as critical to the TMD Warfighter. Reach back support bridges the continuity gap between agencies' resident mobile missile analytical talents and those of our forward deployed mobile missile SMEs in theater. Both forward deployed SMEs and reach back support is vital to providing TMD Warfighters with situational awareness and high quality all-source analysis products. This

enables TMD Warfighters to maintain regional mobile missile situational awareness and have a decision advantage.

Organizations that Comprise the SIMME

Key SIMME Organizations shown in Table 3 come from DoD and/or the IC, and have key SIMME leadership or significant direct coordination roles or forward deployment SME responsibilities.

Table 3. Key SIMME Organizations

Agency	Mission	SIMME Contribution
ODNI	Leads the IC; principal advisor to the President, intelligence matters related to the national security; oversees the coordination of foreign relationships between the elements of the IC; establishes requirements and priorities for collection, analysis, production, and dissemination of national intelligence; transforms the IC.	Provides overall counter mobile missile intelligence vision and strategy for the IC; designates lead national intelligence agency for integrating on-going and future mobile missile activities and operational control of the SIMME.
Office of Secretary of Defense for Intelligence (OSD-I)	Principal staff assistant and advisor to the Secretary of Defense regarding intelligence, counterintelligence and security matters. Director of Defense Intelligence and reports directly to the DNI as his principal advisor regarding defense intelligence matters.	Provides defense intelligence policy development, planning and resource management for the SIMME.
DIA MSIC	DoD authority on scientific and technical intelligence on foreign SRBMs.	Provides defense all-source analysis and production for SRBMs. MSIC has TBM specialists and generalists. MSIC could provide threat

Table 3

(Continued)

TBM SMEs forward embedded with TMD Warfighters and 24/7 reach back support

National Air and Space Intelligence Center (NASIC)

Serves as primary producer of intelligence on foreign air and space forces, weapons and systems; determines forces, weapons and systems performance characteristics, capabilities, vulnerabilities and intentions.

Provides defense scientific and technical analysis of threat Long-Range ballistic missiles and LACMs. NASIC workers include ballistic missile and LACM specialists, and generalists with ballistic missile and LACM regional emphasis. NASIC could embed Long Range Ballistic and LACM analysts forward to warfighters and 24/7 Reach back support during crisis.

National Geospatial-Intelligence Agency (NGA)

DoD Combat Support Agency; develops imagery and map based intelligence solutions.

Provides foreign ballistic missile and LACM imagery analysis and products; Overhead intelligence collection against threat TBM/LACM forces. NGA could provide embedded NGA Support Teams (NSTs) and 24/7 Reach back support during crisis.

Adapted from Office of the Director of National Intelligence. *An Overview of the United States Intelligence Community for the 111*th Congress, 2009.

Table 4 depicts the Major Reach back Supporting SIMME Organizations. They are unique because they come from DoD and/or the IC, and have threat 24/7 Reach back TBM/LACM analytic production support or provide missile launch indications and warning.

Table 4. Major Reach back Supporting SIMME Organizations

Agency Central Intelligence Agency (CIA)	Mission Produces all-source national security intelligence for senior US policymakers; collects human source intelligence.	SIMME Contribution 24/7 Reach back during crisis operations. Except for WINPAC missile analysts, CIA provides foreign ballistic missile and LACM generalists with regional emphasis.
CIA Weapons Intelligence, Nonproliferati -on, and Arms Control Center	Provides strategic intelligence on foreign weapon; studies the development of the spectrum of threats, including weapons of mass destruction (nuclear, radiological, chemical, and biological weapons) and all types of missiles, including ballistic, cruise.	24/7 Reach back during crisis operations. Provides foreign ballistic missile and LACM specialists and generalists with regional emphasis.
Defense Special Missile and Astronautics Center	All-source intelligence center jointly operated by DIA and NSA; DoD focal point for real-time mission operations, analysis, and reporting of specialized, worldwide, all-source intelligence data.	24/7 Reach back during crisis operations.Provides indications and warnings on threat launches.Provides time sensitive alerts, initial event assessments.
DIA	DoD combat support agency (CSAs); major producer and manager of foreign military intelligence; provides military intelligence to warfighters, defense policymakers and force planners.	24/7 Reach back during crisis operations. If designated serves as lead IC agency for SIMME. Provides general military threat all-source products on threat TBM/LACM forces. Could provide 24/7 reach back support during crisis.

Table 4.	(Continued)	24/7 Reach back during crisis operations. Provides SIGINT on foreign threat TBM/LACM forces.
National Security Agency	US's cryptologic organization; signals intelligence mission collects, processes, and disseminates intelligence from foreign signals.	
National		
Ground Intelligence	DoD primary producer of ground forces intelligence.	24/7 Reach back during crisis operations. Provides analysts that
Center	forces intelligence.	function as foreign TBM/LACM
		generalists with regional emphasis. NGIC provides resources on ballistic missile launchers, and ground support equipment.
Office of Naval	Produces global maritime intelligence	24/7 Reach back during crisis
Intelligence	for the Navy; develops scientific and technical intelligence on foreign anti-	operations. Provides general military threat all-source products on foreign
	ship and sea-launched ballistic missile missions.	anti-ship and sea/sub-launched ballistic missile forces.
Strategic Command	Deters attacks on US vital interests;	24/7 Reach back during crisis
0 0111111111111111111111111111111111111	delivers integrated kinetic and non- kinetic effects to include nuclear and	operations. Provides Indications and Warnings on threat launches.
	information operations in support of US	
	Joint Force Commander operations; synchronizes global missile defense	
	plans and operations.	

Adapted from Office of the Director of National Intelligence. *An Overview of the United States Intelligence Community for the 111th Congress*, 2009.

Defining the Warfighter Community

TMD Warfighters are comprised of COCOM Air Forces, and Army Air and Missile Defense Commands (AAMDCs) and Detachment (AMD-D). 16 "TMD encompasses all activities focused on the identification, integration, and employment of forces supported by theater and national capabilities to detect, identify, locate, track, minimize the effects of, and destroy enemy ballistic missiles." 17

The COCOM Air Forces or Major Command (MAJCOM) is the superior hierarchical level of command. The Numbered Air Force (NAF) is a level of command directly under the MAJCOM. An Air Operations Center (AOC) is a command center used by the MAJCOM/NAF to manage air combat operations in a military theater. Fittingly, the term Joint Air and Space Operations Center (JAOC) is used when there is more than one military service working in an AOC. As expected, the term Combined Air and Space Operations Center (CAOC) is when an AOC is conducting allied or coalition operations. The IC SME forward deployed missile analysts could embed with the Air Intelligence Squadron in the Intelligence, Surveillance and Reconnaissance Division (ISRD) within the AOC. The ISRD provides the Combined Force Air Component Commander, the AOC and subordinate units with intelligence, ISR operations and targeting.

Following the 1991 Persian Gulf War, the US Army fielded AAMDCs in order to provide AMD command and control units at the theater level. The AAMDC provides a significant focus on countering adversary offensive air and missile capabilities, especially the mobile missile regional threat. The Army currently has three AAMDC's (two active component, and one fully reserve component) and one active component AMD-D.

The AAMDC mission is to strategically deploy combat ready air defense artillery units and perform theater air and missile defense planning, coordination, integration, and execution in support of COCOM priorities. In wartime, the AAMDC deploys into the theater of operations in support of the Army forces commander ensuring Army TMD operations are properly coordinated and integrated with those of joint and multinational forces.¹⁹

The AAMDC integrates the operational elements of active air defense, passive air defense, attack operations, and C2 systems and intelligence. The AAMDC conducts split-based operations to provide the necessary support and deploys liaison teams to major theater C2 headquarters to ensure integrated and synchronized operations. According to doctrine, "The AAMDC should be collocated with the AOC, if established, and conduct collaborative counter air intelligence preparation of the battle space, planning, and execution control. In distributed operations, the AAMDC is not necessarily in the AOC but is still functionally tied to it."

An AMD-D is a new theater level Army air and missile defense unit. It is similar in mission to AAMDCs, but its staff structure is smaller than an AAMDC. The SIMME could embed mobile missile analysts within the intelligence sections of both the G2 AAMDCs and/or the S2 of the AMD-D.

SIMME and TMD Warfighter Collaboration

The SIMME is envisioned as a net-centric, information enterprise, which employs virtual collaboration. TMD Warfighters and enterprise intelligence analysts work together, in real or near time, exchanging intelligence and situational awareness on adversary regional mobile missiles. The SIMME would be globally networked, integrated with mobile missile analysts and operations center watch officers from a myriad of IC agencies, centers and COCOMs. The SIMME intelligence uses electronic documents, digitized maps displaying information gathered

from missile defense sensors throughout the battle space, or other pertinent information available in a common effort.²²

The SIMME use of electronic mail (email), text chat, web conferencing, shared white boarding services, video teleconferencing and web portals, all part of the virtual collaboration family, significantly compress time and space factors. In contrast to email, text chat allows for synchronous, real time conversations in a one to one or multi-user conference. Text chat provides a forum by which information submitted is immediately available to all users participating in the SIMME chat forum. Given the flattening of organizational structures through virtual collaboration, the instantaneous access to threat mobile missile intelligence information allows analysts to self-synchronize their operational picture of regional mobile missile threats.²³

The SIMME should leverage cutting-edge tools like A-Space, an ODNI project to develop a common collaboration workspace for all IC analysts that provides unprecedented access to interagency databases.²⁴ Moreover, the ODNI on 16 January 2009 announced the IC would use the same collaboration tools as DoD, including IBM Sametime and a combination of Adobe Connect and Jabber.²⁵ The SIMME should use the IC developed Missile Threat Portal. The Missile Threat Portal provides critical scientific and technical threat intelligence data from diverse IC data servers to IC analysts, TMD Warfighters and to the Ballistic Missile Defense Systems Command, Control, Battle Management and Communications System Architecture.²⁶

There are four factors that have contributed to the IC's ability to collaborate with the warfighter. These changes have occurred within the past ten years, and have enabled favorable IC/DoD organizational and cultural conditions for establishment of a SIMME.

Evolving Intelligence Workforce: Since September 11, 2001, the IC collectively has hired thousands of new analysts who could enhance SIMME workforce with technological savvy and a

virtual collaboration mindset. For example in 2007, a senior DIA official said his organization "brought on board approximately 950 analysts since Sept 11; therefore DIA and DI have quickly become younger organizations. The recent demographic shift is hugely important and introduces new mindsets. The analysts today have broader backgrounds, are better educated and are more linguistically diverse than before."²⁷

Increase in IC Analyst Deployments: After September 11 2001, the IC greatly increased civilian intelligence analyst deployments to support combat forces in the global war on terror. This vital mission is now an integral part of the IC mission and continues to shape the IC today. The combat support agency mission requires civilian analysts deploying to pass physical and mental standards. It requires civilians to meet COCOM standards for pre-deployment training and specific requirements for intelligence positions. Following a deployment, the IC regains civilians that are more strategically responsive and operationally trained. An example of this is at DIA, "The Agency also has more than 11,000 military and civilian employees deployed around the world to support a wide range of military operations." Moreover, according to the DIA Director, "as a CSA, DIA deploys about 1,500 people a year worldwide in support of agency missions."

Coordinated and Synchronized DoD/COCOM Intelligence Planning: As part of lessons learned from OIF, DoD has moved to coordinate and synchronize intelligence planning (IP) between DoD and the COCOMs. This could enhance SIMME IP coordination with COCOMs and TMD Warfighters. This includes reviewing all COCOM contingency plans, operations plans and base plans on a periodic basis. It also requires the IC produce agency functional support plans, and an overall National Level Intelligence Support Plan for each relevant plan.³⁰

DIA MSIC as Ballistic Missile Lead Integrator: In 2009, a DIA advisory board recommended creating a Defense Intelligence Ballistic Missile Analysis Committee (DIBMAC) and making MSIC lead integrator. In November 2010, MSIC was designated as the Ballistic Missile Analysis Committee chair, ensuring it will lead the integration of disparate analysis efforts from across the IC. The DIRMAC includes NASIC, NGIC, ONI, COCOMs, and other DoD and IC agencies.³¹

RECOMMENDATION

Change is not a destination, just as hope is not a strategy.

---Rudy Giuliani (2008)

The analysis of organizations that comprise the envisioned SIMME and existing TMD Warfighter community, various virtual collaboration networks and family tools, and DoD organizational, cultural changes and initiatives highlight specific recommendations. These recommendations are:

DNI Should Develop a Comprehensive SIMME Vision and Strategy.

The DNI leads the IC and establishes requirements and priorities for collection, analysis, production, and dissemination of national intelligence. The DNI is responsible for transforming the IC into a unified, collaborative and coordinated enterprise. DNI involvement in SIMME is integral and crucial to enterprise success. Real world national security mobile missile and WMD threats mandate both a SIMME Vision and Strategy from the DNI. The DNI then should

communicate the change vision and empower broad based action. He must create the sense throughout the IC that a SIMME is not only necessary, but will benefit everyone.

Nevertheless, some might argue that the ODNI should not take the lead for what is essentially a DoD responsibility and that doing so would undermine the USD (I). Taking the ODNI out of the picture, however, would be a mistake because mobile missile and associated WMD payload threats are a strategic issue that should involve not only DoD agencies and centers, but also the entire IC. It requires action from leaders, collectors and analysts.

DNI Should Establish and Lead a IC SIMME Senior Level Steering Panel

Representatives to the IC SIMME Senior Level Steering Panel come from various agencies and centers. The DNI or representative should chair the panel. It should identify enterprise successes, challenges and resource requirements. The IC SIMME Senior Level Steering Panel should serve to reinforce ties, as well as bolster each organization's understanding of each other. Cooperation amongst all levels of the IC is crucial to collaboration and overall SIMME mission execution.

DNI Should Designate DIA MSIC the Lead IC Center for the SIMME

DIA MSIC has over 12 years of TMD Warfighter support during over 50 COCOM Tier One exercises demonstrating embed of analysts to TMD Warfighters and 24/7 Reach back support. In addition, it is lead integrator and Ballistic Missile Analysis Committee chair.

Therefore, the DNI Should Designate DIA MSIC the Lead IC Center for the SIMME for enhanced collaboration and coordination. As the Lead IC Center for the SIMME, DIA MSIC

should oversee and coordinate between COCOMs and the SIMME for embed of missile analysts and reach back support for exercises and crisis operations.

On the other hand, NASIC might argue that it should take the lead because they have responsibility for some of TBM and the LACM analysis mission. They also could argue that they support the numbered air forces and AOCs. However, the SIMME could require embedding IC analysts with TMD Warfighters within a number of different services—Army, Navy, Air Force and Marine organizations and just not a single service. DIA MSIC supports all of DoD as a joint combat support agency and lead integrator and Ballistic Missile Analysis Committee chair.

USD (I) Should Author SIMME Policy, and Provide Resources for the SIMME.

The USD (I) has dual Defense and IC responsibilities, and in that capacity he should author DoD SIMME policy and provide DoD resources for the stand-up of the SIMME. The USD (I) should seek a General Defense Intelligence Program (GDIP) funding line for longer-term requirements.

However, during this fiscally constrained times getting GDIP funding line is a difficult task. It requires shifting funds from other programs. The good news about the SIMME is that it should be a low cost program. Agencies like DIA MSIC, NASIC, DIA, CIA, NGA, NSA already support major COCOM exercises with analysts and reach back support.

DIA MSIC Should Coordinate Specific IC Agency and Center SIMME Crisis Missions.

The SIMME must organize, train and equip to operate across the full range of military operations. The DIA MSIC should coordinate with NASIC and NGA for forward embedding of

analysts to support TMD Warfighters during crisis. These mobile missile analysts provide extensive and specific all-source mobile missile subject matter expertise.

Reach back support bridges the continuity gap between agencies in-house mobile missile analytical talents and those of our forward-deployed representatives in theater. Both forward deployed analysts and reach back support is vital to providing TMD Warfighters with high quality all-source analysis, products and services. This enables TMD Warfighters to maintain regional mobile missile situational awareness and have a decision advantage.

Nevertheless, NASIC and NGA may not want to contribute analysts for embedding forward with the TMD Warfighters. Some agencies believe that they should not lose their best SMEs to training and forward deployment because they lose that experienced analyst back at home station. In addition, some IC leaders believe scientific and technical intelligence analysts should not deploy to combat zones.

On the other hand, the SIMME only requires a "small footprint forward." and a large virtual reach back. Therefore, by keeping center/agency staffing requirements minimum and leader involvement from steering group, most agencies will be more willing to support.

DIA MSIC Should Develop SIMME Doctrine and Training Programs.

DIA MSIC should author SIMME implementation guidance. The SIMME should conduct internal training, exercises, and evaluations in order to develop tactics, techniques, and procedures. In addition, the SIMME should conduct external real world joint training with IC missile SME analysts embedded with TMD Warfighters. DIA MSIC should capture best practices and lessons learned after each training event. Upon stand-up of the SIMME, DIA

MSIC should update national intelligence support plans to show SIMME mission responsibilities and anticipated analytic support commitment.

DIA MSIC Should Ensure the SIMME Leverages Virtual Collaboration Networks and Tools.

As the coordination authority for all SIMME activities, DIA MSIC should ensure the SIMME leverages virtual collaboration networks and tools including email, text chat, web conferencing, shared white boarding services, video teleconferencing and web portals which compress time and space factors. The instantaneous access to information allows analysts to self-synchronize their operational picture. DIA MSIC should coordinate collaboration networks and tools with TMD Warfighters. The SIMME should conduct internal training, exercises, and evaluations using virtual collaboration networks and tools.

SUMMARY

Mobile offensive missiles are currently the highest priority time sensitive threats in a JTF Commander's area of operations. US military forces have experienced considerable difficulty detecting, fixing, and targeting mobile missiles with sufficient accuracy and timeliness in order to achieve the desired effects. One significant TMD Warfighter lessons learned from OIF was the requirement for enhanced mobile missile threat situational awareness.

The IC must develop a SIMME in order to gain and provide enhanced TMD regional threat situational awareness to TMD Warfighters during crisis. Moreover, TMD Warfighters must leverage the SIMME in order to gain enhanced mobile missile regional threat situational awareness during crisis operations.

Historical experience shows the mobile missile threat is a challenging one for US forces and it is growing; the key to countering the threat is quicker, more accurate intelligence support; the way to achieve that is unified IC action embodied in the SIMME concept; executive action by

the ODNI and USD (I) is needed to initiate the SIMME; doctrine and training will improve IC response times, thereby reducing the mobile missile threat in theater to US forces or allies.

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